

GREENWAYS

Blacksburg's Path to the Future

GOAL

Develop a greenway system that provides natural buffers that improve water quality, reduce the impacts of flooding, and provide wildlife habitat and corridors, as well as opportunities for comprehensive, multi-use trails for alternative transportation, recreation, fitness, and educational, cultural and economic development.

BACKGROUND

Description

Greenways are linear stretches of open space that include recreational, cultural, and natural areas such as parks, trails, and other “green” spaces. Greenways typically follow natural or manmade features such as streams, railways, or roads and are used for transportation, education, recreation, and environmental protection. Greenways benefit the Town of Blacksburg in many ways and are considered an essential community feature. Greenways promote economic development and tourism and increase the beauty of neighborhoods as well as the value of surrounding properties. These corridors enhance the social and psychological well being of citizens by providing them with enjoyable activities and settings in which to spend their leisure time. Greenways provide areas for hiking, biking, picnicking and serve as automobile-free pathways connecting areas of interest. Conservation benefits are also derived from the preservation of greenway corridors through maintaining the integrity of scenic vistas and watersheds, protecting water quality in streams and underground aquifers, and preserving natural habitats and wildlife.

Greenways may link neighborhoods, schools, parks, businesses, and people along bike-walkways (multi-use trails). These greenway trails are a valued amenity in the Town of Blacksburg. The development and use of the greenway system is an outgrowth of community interest in conservation of natural resources, exercise and outdoor recreation, and viable alternatives to motorized transportation.



Figure G-1, Bicentennial Greenway

Planning History

The community is highly committed to the development of a multi-use trail system. Bike-walkway planning efforts began in 1974 with *The Blacksburg Bicycle Trail Study* and the 1975 document entitled *The Blacksburg Bikeway System*. The Bikeway and Sidewalk Advisory Committee was created in the spring of 1988 to review the existing bikeway and sidewalk systems, identify current and future needs, and recommend changes to the Town Council. The committee completed the *1989 Bikeway and Walkway Master Plan* and have continued to be active since its completion, focusing on both the planning and construction of new trail facilities, as well as the development of a public safety and education program.

The community initiated planning for its Greenway system in 1993 under the guidance of a citizen Greenway Committee. In August of 1995, the committee developed a plan that was appended to the 1991 Comprehensive Plan. The development of a greenway system has become a high priority of the community and Town Council. This chapter takes ideas from previous Bikeway and Walkway Master Plans, combines them with new ideas, and creates a guide for the future development greenway trails in Blacksburg.

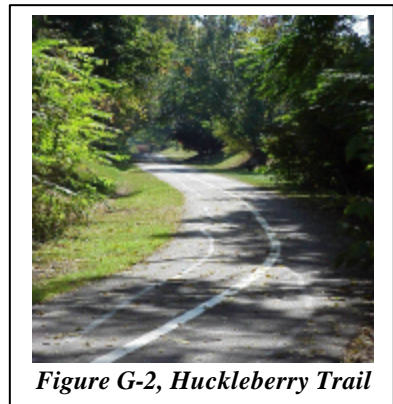


Figure G-2, Huckleberry Trail

Off-Road vs. On-Road

Often in communities there is conflict between the proponents of on-road bike lanes and the proponents of off-road bike trails. In Blacksburg, it is recognized that many citizens enjoy riding bicycles, walking, or jogging on multi-purpose trails that are independent from roads and automobile traffic. Conversely, it is recognized that many citizens enjoy riding bicycles within designated bike lanes on existing roads that are separate from vehicular traffic lanes. Therefore, the current focus is to develop a comprehensive system for both purposes, which occasionally provides for access between the two with smooth transitions. The planning and design of new transportation routes that include sidewalks, bike lanes, and off-road trails in addition to the roadway, is essential to the success of this dual alternative transportation system. Off-road trails are covered in this chapter and on-road bike lanes are discussed in the *Transportation* chapter.



Figure G-3, Huckleberry Trail

Existing Facilities

The bike-walkway network in Town consists of public and private off-road trails and on-road lanes. Approximately 14 miles of roads include bike lanes, although users must share travel lanes with vehicles to reach most destinations. The off-road trail system is approximately 21.3 miles in length and provides recreational and commuting opportunities. Several large neighborhoods such as Hethwood, Shenandoah, Woodbine, and Wyatt Farm contribute to this trail system. The Town has partnered with Montgomery County, Virginia Tech, and the Town of Christiansburg to operate the six-mile Huckleberry Trail, which lies on an abandoned rail right-of-way and links the towns via the university and county. In addition, the university trail network is a community amenity used by many for recreation and commuting.

Opportunities

- ◆ Strong community support exists for greenways and pedestrian corridors that are frequently used for recreation, physical fitness, and transportation.
- ◆ The Greenway/Bikeway/Sidewalk/Corridor Committee strongly advocates the planning and development of multi-use trails and greenways, along with bike lanes and sidewalks.
- ◆ Town residents are close to the George Washington-Jefferson National Forest, the New River, and open spaces on the Virginia Tech campus.
- ◆ A framework for a greenway system already exists with a network of open streams throughout the town, especially west of the Route 460 Bypass, and features such as the Huckleberry Trail, the Hoge easement, and the university bikeway system and pedestrian network.

Challenges

- ◆ Public funding is limited for land acquisition and construction of greenways.
- ◆ Opportunities for greenway connections are limited in the more developed portions of Town.
- ◆ Many streams in older, more established parts of Town have already been piped.
- ◆ Many residential neighborhoods and apartment complexes lack greenway access.
- ◆ A grade separated crossing for the Huckleberry Trail should be provided as part of the Urban Road Improvement Program's Hubbard Street Extension project.

What is Changing

Public support for development of a townwide greenway system is growing. The Blacksburg Greenway/Bikeway/Sidewalk/Corridor Committee, a very active citizen committee, continues to help the system develop. Citizens and businesses are beginning to recognize the value of green spaces and corridors throughout the community. Many opportunities currently exist to expand and create greenway links throughout Town, and the network is frequently extended through new neighborhoods and linked to new public facilities. As the town continues to develop, these quality green spaces will have a visible effect on the overall quality of life in Blacksburg.

The Round-up for Bikeways program was initiated in 1992 as a dedicated funding source to promote, enhance, or build new bike lanes and trails. The fund typically raises between \$2,000 and \$4,000 a year. These funds are used annually to support a safety and education program for Blacksburg's bikeways, they have financed the promotion of Bike-to-Work Day and they have also produced various educational materials.

The attraction of special events to the town increases interest in bike facilities and events. There are several bike rider clubs in the area that are also active promoters of the system and provide information on safety and maintenance needs on a daily basis.

PATHS TO THE FUTURE

BLACKSBURG'S BIKEWAY / GREENWAY MASTER PLAN

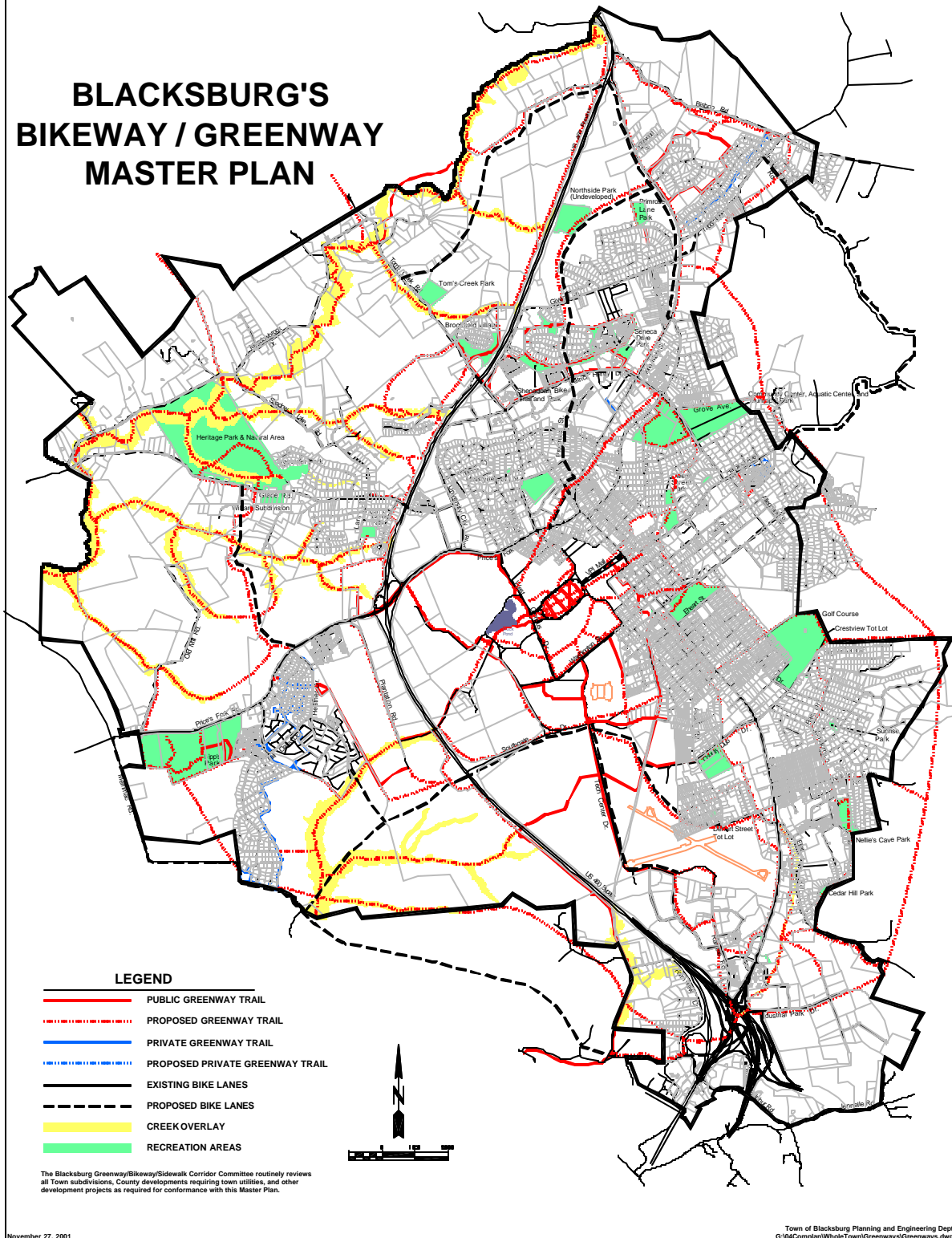


Figure G-4, Bikeway/Greenway Master Plan

GENERAL POLICIES

- ❑ Encourage citizen involvement in the development of the greenway system.
- ❑ Promote awareness and safe use of the greenway system, through comprehensive education and enforcement programs.
- ❑ Coordinate the greenway system with area stormwater management.
- ❑ Preserve and reclaim natural floodplains to enhance water quality; protect wildlife habitats and open space; and provide recreational, educational, and alternative transportation opportunities.
- ❑ Create a greenway system that enhances economic development and attracts tourists.
- ❑ Create a cost-efficient infrastructure of multi-purpose trails that utilizes various corridors and connects to parks, schools, businesses and other community amenities to provide a system of contiguous, regional trail mileage for extensive recreational and alternative transportation use.
- ❑ Develop an attractive, cost-effective, and convenient greenway system that connects public and private open spaces throughout Blacksburg such as the Virginia Tech campus and the Hoge land trust.
- ❑ Encourage private support and development of greenways that use planned and existing utility easements, road acquisition and construction, etc. to minimize public costs of greenway development.
- ❑ Work with neighboring jurisdictions, as well as civic and corporate entities to plan the town greenway system as a component of a regional greenway/blueway system, with connections throughout the New River and Roanoke valleys and beyond, including the George Washington-Jefferson National Forest and the New River Trail State Park, to maximize access to schools, neighborhoods, businesses, and the natural environment and to provide a world-class network for bicyclists and pedestrians.
- ❑ Consider the inclusion of bike-walkways in planning for all transportation and capital projects and seek funding for the construction of bike-walkways from both public and private sources, including funding derived from the development process.
- ❑ Plan the greenway system to be eligible for all private, local, state, and federal funding programs including moneys available through the Transportation Enhancement Program (TEA-21), the 1990 Clean Air Act Amendments, Recreational Access Funds, the Virginia Outdoor Fund, and Scenic Byways Act.

- ❑ Develop a greenway system that protects the biological diversity of plant and animal species, maintains the connections between natural communities, provides wildlife corridors, includes the area's natural and cultural diversity, and preserves linear stretches of open space.

ACTION STRATEGIES

in general

- Coordinate with the Virginia Tech Campus Master Plan and the New River Valley Bikeway/Walkway Plan.
- Provide clear operational responsibilities to maintain an attractive, useful, and safe greenway system.
- Use creative funding sources such as "Round up for Bikeways" to expand the system.
- Invite periodic review of policies and ordinances governing greenways by the Corridor Committee.
- Identify and record threatened and endangered species, specimen trees, and other important natural features within greenway corridors, and minimize disturbance during trail design and construction.
- Plan the greenway system to coordinate with the bike lane and sidewalk systems throughout Blacksburg and include a variety of natural and manmade features in the total system such as: 100-year floodplain, wetlands, surface water, and watershed areas; specimen trees, land with slopes greater than 20%, existing parks (local, state, national); discontinued roads, alleys, unbuilt rights-of-way, historic road beds, public transportation nodes; gas, power line, and sewer line easements.
- Design and construct greenways with significant consideration towards archeological and historic sites in terms of preservation, accessibility, and linkage to other historic sites.
- Incorporate the greenway into roadway designs, including preliminary engineering, right-of-way acquisition, construction, and funding where the greenway system parallels or shares highway access. If adequate right of way is not obtainable, use grade separations, physical barriers and/or the use of paved shoulders to separate the greenway system from vehicular roadways. Coordinate design of these concepts to maintain scenic views and to ensure user safety.
- Ensure appropriate coordination and integration of greenway elements into residential or commercial site development through proffers and donations for easements and construction whenever a proposed development abuts a planned part of the greenway system.

- Encourage creative development layouts and other incentives as planning tools to promote greenways throughout the Town.
- Provide greenway access points at park locations or other public facilities (schools, libraries, municipal offices, etc.) as well as at businesses. Greenway access points should have convenient parking, bike racks, shelters, and other facilities as needed to promote use of the trail system.
- Develop a bike-walkway system that meets or exceeds Virginia Department of Transportation (VDOT) and the American Association of State Highway and Transportation Officials (AASHTO) standards.
- Construct multi-use trails that are accessible to the physically challenged and meet ADA standards as topography permits.
- Utilize the safety and public awareness coordinator from existing police personnel to promote trail and bicycle safety and education in elementary, middle, and high schools.
- Maximize opportunities to uncover channeled urban streams.
- Encourage the development of a regional greenway and blueway system.

within 5 years

- Connect to the George Washington-Jefferson National Forest.
- Construct the Bicentennial Trail extension from College Avenue to the community center.
- Provide all neighboring jurisdictions, regional and state agencies, and service authorities with copies of the adopted Greenway Master Plan (*Figure G-6*) of this comprehensive plan and encourage them to provide linkages to the town's greenway system.
- Submit priority greenway system projects that parallel or include highway access for inclusion in the VDOT Six-Year Plan to be eligible for VDOT Revenue Sharing Funds and Secondary Road Funds.
- Promote the Adopt-A-Blacksburg-Spot program locally to allow private citizens, businesses and service organizations to keep the greenway system litter-free and attractive, and to promote the greenway system outside the New River Valley using public service media opportunities to specifically focus on attracting tourists.
- Research legal documents, land protection strategies and funding sources available for land trusts in Virginia.

- Develop a greenway system design manual, similar to nationally accepted greenway system construction methods (e.g., the National Park Service's Trail Management Guidelines), that incorporates detailed specifications for:
 - surface materials and trail widths
 - traffic control devices (eliminate road buttons, reflectors, rumble strips)
 - safe drainage grate designs (small grid design or keep out of trail path)
 - adequate site distances to reduce accidents (see VDOT standards)
 - safe slope and drainage designs
 - railroad, bridge and waterway crossings
 - bikeway signage
 - bike-walkways should be designed to be located within a greenway corridor
- Plan and develop connections to the existing private trails in Hethwood and Woodbine, the university system of trails and open spaces, the Corporate Research Center, elementary schools, and the Heritage Park & Natural Area from the Huckleberry Trail.
- Plan the Cedar Run, South Main, North-South Connector, and Tom's Creek greenways and begin acquisition of the land through the development process, easements, or fee simple purchase.
- Design a greenway overlay district that provides effected property owners with incentives for designating greenway areas, such as tax reductions.
- Amend the Town Code as needed to allow enforcement personnel to issue citations to users who disobey greenway system rules.
- Provide bicycle racks in the downtown and other major use areas to increase convenience for cyclists.

within 25 years

- Connect the greenway system and trails, where appropriate and desirable, to greenways and trails planned within Montgomery and Giles Counties and beyond including the Blue Ridge Parkway, Appalachian Trail, state and federal reserves, and river corridors.
- Continue to extend the trail network to schools, to both private and other public trail systems, the library, and Huckleberry Trail connections.
- Include equestrian trails in some greenway and open space areas.
- Establish a greenway system land trust to solicit private donations and leverage scarce public funds to provide for land acquisition, construction, and maintenance of existing and future greenway system components.

- Actively market the greenway land trust program through an aggressive public relations campaign that includes brochures and video on the benefits of participation through monetary contributions, easements, estate bequests, bargain sales, and donations.
- Provide safety phones periodically along the trail system and safety lighting along bike-walkways where appropriate, such as in the downtown area or densely populated neighborhoods.
- Collect and report economic benefits related to proximity to a greenway system.
- Encourage employers to provide incentives to employees who regularly bike or walk to work.

beyond 25 years

- Complete an off-road network of trails that is continuous and interconnected including, but not limited to, the Mary Draper Ingles, Nellie's Cave Road, Municipal Golf Course, North Main, Ellett Road, and Old Stagecoach Road trails, as well as the Harding/Main and Commerce/Ellett connectors.
- Complete the Blacksburg Outer Loop trail system.
- Provide snow removal for all bike-walkways used for commuting.

2001-06 Corridor Committee Program Recommendations

High Priorities

- Local Bicycle Map and Safety Brochure
- Safety and Public Awareness Coordinator
- Public Service Announcements to Promote Safety
- Bicycle Safety Education in Schools
- Increased Enforcement of Traffic Laws for Cyclists & Drivers Endangering Cyclists
- Bicycle Friendly Bumper Sticker
- Police on Bikes
- Bicycle Friendly Community Signage at Entrances
- Safety Education at VA Tech

Medium Priorities

- Lean for Green Markings and Education
- Bicycle Safety Table at Local Events
- Improved Delineation of Bike Lanes
- Update Code to Increase Bicycle Safety
- Improved Signage on Trails
- Annual Cycling Event
- Explore Trail Widening Alternatives

Low Priorities

- Adopt a Spot for Cycling and Walking
- Leave Your Car At Home Day
- Bicycle Rodeo

Other Projects

- * Mall Fund Raising Ride *
- Bike Use Promotional Campaign * Bike Safety Seminar * Violation Fines
- *Articles on Bicycle Safety *

Figure G-5, 2001-06 Corridor Committee Program Recommendations

Greenway Priority List

Trail Name	Location
High Priorities	
National Forest Connector	Meadowbrook Drive to National Forest
Heritage Park Connector	Prices Fork Road to Heritage Park & Natural Area
Prices Fork Connector	Prices Fork Rd. south to Huckleberry Trail
Hethwood Greenway	Plantation Road along Stroubles Creek to Hethwood Trail
North Main St. Connector	Patrick Henry Drive to Wyatt Farms
Central Blacksburg Greenway	Bicentennial Trail from College Avenue to Community Center
Corporate Research Center (CRC) Connector	Complete southwest segment of Airport Loop
South Main Greenway	Ramble Road to Margaret Beeks Elementary School
Margaret Beeks Trail	Margaret Beeks School to Hubbard Street and Cedar Run Creek
Cedar Run Greenway	Ellett Road at Main Street via Cedar Run Creek to Industrial Park Drive
Tom's Creek Greenway	Extending the length of the stream
North-South Connector	Prices Fork Road at Plantation Road, along Rt. 460, north to Brush Mountain Road
Medium Priorities	
Stadium Trail	Behind Lane Stadium (on campus) from Washington St. to Southgate Drive
Hethwood Trail Extension	Plantation Rd. to Duck Pond Dr. north of Stroubles Creek
University Trail System	Trails throughout campus per the University Master Plan
Patrick Henry Trail	High School to North Main
Givens Trail, Section A	Shenandoah Trail system to Givens Lane, Wyatt Farms, and Bishop Road
Givens Trail, Section B	From the Shenandoah Loop following the abandoned Givens Lane right-of-way
Stroubles Creek Greenway	West from the existing Hethwood trail to the corporate limits
Wharton Street Connector	Huckleberry Trail at library via former BMS and Wharton Street to Harding Elementary
Hubbard Street Trail	Connects the South Main Trail with the Huckleberry Trail; NE segment of airport loop
Shadow Lake Road Trail	Parallel to Shadow Lake Rd. from Glade Road to Meadowbrook Dr.
Other Priorities	
Mary Draper Ingles Trail	Duck pond via Glade/Shadow Lake Roads to Tom's Creek Greenway and the National Forest east of Laurel Ridge
Nellie's Cave Road Trail	Grissom Lane to Luster's Gate Road
Municipal Golf Course Trail	Middle School to the Golf Course
North Main Trail	Wyatt Farms to US 460 Bypass
CRC Loop	
Ellett Road Greenway Trail	Follow Cedar Run and Ellett Road out of Town
Commerce-Ellett Connector	End of Commerce Street by Blacksburg Transit to Ellett Road
Harding to Main Connector	Harding Avenue to North Main Street
U.S. Bicentennial Bikeway Connector	Connects the town's trail system to the Bicentennial Bikeway (Rt. 76) with connections to Roanoke County
Old Stagecoach Road Trail	Follows un-built Roanoke Street right of way and makes a connection to Apperson Drive
Blacksburg Outer Loop	Arterial trail system around the entire Town

Figure G-6, Greenway Priority List